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REC'D 22 DEC 2003

WIPO PCT

P1 1106161

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APPLICATION NUMBER: 60/421,064

FILING DATE: October 25, 2002

RELATED PCT APPLICATION NUMBER: PCT/US03/34147



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

10/25/02
1129 U.S. PTO
Sir:

Transmitted herewith for filing is the PROVISIONAL APPLICATION
for a patent of Inventor(s):

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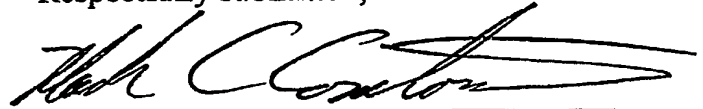
Title: DETAILS ON THE REPORTING IN THE DIVERSE STANDARD TASKING
AND REPORTING INVENTION

Enclosed are:

- ☒ A Cover Page and One (1) page of specification.
- ☒ A check in the amount of \$160.00 to cover the filing fee.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or to credit any overpayment to Deposit Account No. 04-1679. A duplicate of this sheet is enclosed.

Respectfully submitted,



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Dated: October 25, 2002
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DETAILS ON THE REPORTING IN THE DIVERSE STANDARD TASKING AND
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Grayson Wireless Proprietary

Details on the Reporting in the Diverse Standard Tasking and Reporting Invention

One of the embodiments of this invention involves tasking using an ETSI open standard (Abis), and reporting using an ANSI standard (J-STD-036, E5). There has been more work done on the details of the reporting aspects of this embodiment.

The particular approach we are using in this case is to monitor the Abis interface, looking for 911 calls. Once a 911 call is detected, information about the call traffic channel assignment is collected to allow the system to tune to the correct traffic RF channel, time slot, etc. to collect location-oriented measurements. The messaging on the Abis interface identifies the mobile phone that is placing the call using one of two indicators, either the IMSI (International Mobile Subscriber Identity) or the TMSI (Temporary Mobile Subscriber Identity). In parallel with, and independent of, the Abis activities, message traffic is occurring on the E5 interface. There are two cases to consider.

In one case, the MPC (the network entity connected to the system (PDE) over the E5 interface) will task the system to locate the 911 call. The tasking message will identify the calling mobile by his mobile phone number. Thus the two interfaces identify the mobile phone using two different means that the system cannot link. As part of the information coming over the Abis interface, the system can know the serving site and sector of the call, and the approximate time of the call. As part of the tasking information received over the E5 interface, the system is told the serving site and sector and the approximate time of the call. Thus, the system can use the serving site and sector and time of the call to link the information from the Abis interface and the E5 interface. The system locates the call, and then reports the location in response to the tasking using the mobile phone number, which the MPC understands.

In the other case, the system pushes a location to the MPC without a tasking. The location would identify the phone that was located using either the IMSI or the TMSI. The push message would contain the serving site and sector of the mobile and optionally the estimated time of the call. The MPC can now perform the same matching operation to know the location reported belongs to a certain mobile phone identified by its phone number. If the time of the call is not part of the message, then the time of the push location can be used as a time of call estimate, taking into account the time the system takes to generate a location after receiving a call initiation message over the Abis interface.